NEW ENGLAND FARMER.

PUBLISHED BY THOMAS W. SHEPARD, ROGERS' BUILDINGS, CONGRESS STREET, (FOURTH DOOR FROM STATE STREET.)

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[From Elkington on Draining.]

AN ACCOUNT OF THE MOST APPROVED MODE OF DRAINING LAND, &c. &c.

In the year 1763 Mr. Elkington was left, by his father, the possession of a farm, called Princethorp, in the parish of Stretton upon Dunsmore, and county of Warwick. The soil of this farm was very poor, and in many places so extremely wet, that it had been the cause of rotting several hundred sheep; which was the first circumstance that determined him, if possible, to drain it; which he began to do in 1764.* The field in which he began, was of a wet clay soil, rendered almost a swamp (and, indeed, in some places, a *shaking bog*,) by the springs issuing from a bank of gravel and sand adjoining it, and overflowing the surface of the clay. In order to drain this field, he cut a trench about four or five feet deep, a little below the upper side of the bog, or where the wetness began to make its appearance; and after proceeding with it so far in this direction, and at this depth, he found it did not reach *the main body of subjacent water*, from whence the evil proceeded. On discovering this, Mr. Elkington was at a loss how to proceed. At this time, while he was considering what was next to be done, one of his servants accidentally came to the field where the drain was making, with an iron crow, or bar, which the farmers in that county use in making holes for fixing their sheep hurdles.—Mr. Elkington, having a suspicion that this drain was not deep enough, and being desirous of knowing what kind of strata lay under the bottom of it, took the iron bar from the servant and after having forced it down about four feet below the bottom of the trench, on pulling it out, to his astonishment, a great quantity of water burst up through the hole he had thus made, and ran down the drain. This at once led him to the knowledge of wetness being often produced by water confined farther below the surface of the ground than it was possible for the usual depth of drains to reach, and induced him to think of applying an auger, as a proper instrument in such cases.

Thus did the discovery originate from chance, the parent of many other useful arts! Fortunate it is for society, when such accidents happen to persons who have sense and judgment to avail themselves of the hints thus fortuitously given! In this manner, he not only accomplished the drainage of this field, which soon rendered it completely sound, but likewise all the other wet ground on his farm.

The success of this experiment soon extended Mr. Elkington's fame, in the knowledge of draining, from one part of the country to another; and after having drained several farms in his neighborhood, with equal success, he at last came to be very generally employed; has been since, and is now (1797,) engaged in various parts of the kingdom, which shall be more particularly noticed in the sequel. It is, indeed, now, impossible for him to execute half the employment he has in hand, or to accept the numerous offers that are every day made to him. From his long practice and experience, he is now so successful in the works which he undertakes, and also in judging of the internal strata of the earth, and nature of springs, that he can, with remarkable precision, judge where to find water, and where to trace the course of springs that make no appearance on the surface of the ground. The rules on which he acts, with regard to these discoveries, will be afterwards explained, in treating of the nature of wet grounds caused by springs.

Lastly—Within these few years past, since his practice has been so widely extended, and so generally successful, he has drained, in various parts of England, particularly in the middle counties, many thousand acres of land; which, from being originally of little or no value, is now as productive as any in the kingdom, capable of producing the most valuable kinds of grain, or of feeding the best and healthiest species of stock.

Some persons have erroneously entertained an idea, that Mr. Elkington's sole skill lies in applying the auger for the *tapping of springs*, without attaching any merit to his method of conducting the drains. The accidental circumstance above stated, gave him the first notion of using an auger, and directed his attention to the practice of draining; in the course of which he has made various useful discoveries, which are afterwards more fully explained. It will be sufficient here to remark, that draining, according to his principles, depends upon three points, 1st. Upon finding out the *main spring*, or cause of the mischief; without which nothing effectual can be done. 2d. Upon taking the level of that spring, and ascertaining its *subterraneous bearings*; a measure never practised by any, till Mr. Elkington discovered the advantage to be derived from it; for if the drain is cut a yard beyond *the line of the spring*, you can never reach the water that issues from it; and, by ascertaining that line, by means of levelling, you can cut off the spring effectually, and, consequently, drain the land in the cheapest and most eligible manner. The manner in which this is done, will be afterwards described. And, 3dly, By making use of the auger to reach or *tap* the spring, when the depth of the drain is not sufficient for that purpose.

In regard to the use of the auger, though there is every reason to believe Mr. Elkington was led to employ that instrument from the accidental circumstance stated above, and did not derive it from any other channel; yet there is no doubt that others have hit upon the same idea, without being indebted for it to him. It is said, that in attempting to discover mines by means of an auger, springs have been tapped, and the adjacent wet ground thereby drained, either by letting the water down, or giving it vent to the surface. The auger has also been made use of in bringing water into wells, by boring in the bottom of them, to save the expense of digging, especially in Italy, where it is probable that the practice is very ancient. But *that it has been used in draining land, before Mr. Elkington made this discovery, no one has ventured to assert.*

In Dr. Nugent's Travels through Germany, printed anno 1768, there is an account of a mode of draining land, on principles, in some respects, of a similar nature; not, indeed, by the use of the auger, but by making pits; and in a publication by Dr. James Anderson, entitled, "Essays on Agriculture & Rural Affairs," printed anno 1797, after describing a mode of tapping, the doctor had adopted, by sinking small pits, he adds, "I have often imagined that the expense of digging these pits might be saved, by boring a hole through this solid stratum of clay, with a wimble made on purpose; but as I have never experienced this, I cannot say whether it would answer the desired end exactly."

Mr. Elkington, however, made use of the auger prior to the date of these publications, or to any hint he could possibly derive from any publication in the English language; though it is probable that, in so far as regarded *tapping of springs for wells*, the use of the auger was well known in some parts of Italy. Buffon states, "that, in the city of Modena, and four miles round, whatever part is dug, when we reach the depth of sixty-three feet, and bore five feet deeper with an auger, the water springs out with such force, that the well is filled in a very short space of time. This water flows continually, and neither diminishes nor increases by the rain or drought." Mentioning the different strata that are to be met with to this depth, he adds: "The successive beds of fenny or marshy earth and chalk, are always found in the same order, wherever we dig; and very often the auger meets with large trunks of trees, which it bores through, but which give great trouble to the workmen; bones, coals, flint, and pieces of iron, are also found."—*Buffon's Nat. History.*

ON THE PRINCIPLES OF MR. ELKINGTON'S MODE OF DRAINING.—It is remarkable, that the principles on which the draining of lands depends, being so great a desideratum in agriculture, should have been so little known or attended to; or that the practice of it, according to these obvious principles, should have been so much confined, while improvements in the other branches of husbandry have been carried almost to the highest possible perfection.

However intricate or abstruse it may hitherto have been considered, even by those who were otherwise well informed in the theory of agriculture, of which it forms the most important branch; yet it will appear, from the following observations, to be founded on circumstances the most plain and rational, and which, when reduced to practice, produce those effects which a simple knowledge of the cause naturally points out.

Wetness in land proceeds from two causes, as different in themselves as the effects which they produce.

It proceeds either from rain water stagnant on the surface, or from the water of springs issuing over, or confined under it. On clay soils, that have no natural descent, wetness is

* After the drainage of this field was completed, Mr. Elkington's flock was never afterwards affected with that disease.

commonly produced by the first of these causes, but in a variety of situations, it may proceed from the latter.* But,

The principles of Mr. Elkington's art are so closely connected with the nature of springs, that, without a knowledge of these, and the causes producing them, it is impossible to practice it either with success or advantage; for *surface draining*, where the wetness proceeds from subjacent water, is only alleviating the effect, in place of removing the cause. It will, therefore, be necessary, in the *first* place, so far to ascertain the nature of springs, and their connection with the formation of bogs, as to enable the practical drainer more easily to comprehend the theoretical part of Mr. Elkington's system.

From its general external appearance, and by the perforations that have been made in it by quarries, wells, and other subterraneous pits, the earth is known to be composed of various strata; which, being in their nature of opposite consistence, are distinguished by the names of *porous* and *impervious*. Those strata, which, from their more open composition, are porous, and capable of receiving the rain that falls on them, include rock, gravel, sand, and such marls as are of an absorbent quality. Clay, and a certain kind of gravel, having a proportion of clay in its composition, which, by binding and cementing the small stones together, render it equally close and tenacious as clay itself; with such rock as is of a close and compact nature, without any fissures in it, are the principal strata that most resist the reception of water, and that are capable of retaining it, on their surface, till exhaled by the sun, or carried off by suitable drains, and are termed impervious.

Springs, therefore, originate from rain water falling upon such porous and absorbent surfaces, and subsiding downwards, through such, till, in its passage, it meets a body of clay, or other impenetrable substance, which obstructs its farther descent; and here, forming a reservoir, or considerable collection of water, it is forced either to filtrate along such body, or rise to some part of the surface, where it oozes out in all those different appearances that are so frequently met with. This is evident from the immediate disappearance of the rain water, as it falls on some parts of the ground, while it remains stagnated on others, till carried off by evaporation; and from the strength of springs being greater in wet than dry seasons. Hence, after incessant rains, they are observed to break out in higher situations, and as the weather becomes dryer, give over running out, unless at their lower outlets. The strength of springs also, or quantity of water, issuing from them, depends chiefly on the extent of high ground that receives and retains the rain, forming large reservoirs, which afford them a more regular supply. Thus bogsprings, or such as rise in valleys and low situations, are much stronger, and have a more regular discharge, than those which break out on higher ground, or on the sides of hills.

Independently of these causes, there are certainly great springs contained in the bowels of the earth, otherwise, how could the many rivers that intersect it, be supplied with such vast quantities of water as they discharge, the rains falling on its surface, or the dews that descend, not being adequate for that purpose; but, as this may be considered among those arcana of nature which have not yet been sufficiently explored, and lying at too great a depth to affect the surface, it comes not within the limits of the present inquiry.

With the nature and cause of springs, that of bogs is intimately connected: for where springs breaking out in the manner above described, run over a flat surface of clay, and cannot get off with sufficient rapidity, or are not confined to a narrow channel, the superabundance of water must cause the dissolution of all the coarse vegetables it produces, which together with part of the natural soil itself, are formed into a peat earth, every year increasing in depth; and the extent of such bog, or morass, is according to the quantity of water, and to that of the flat ground on which it is formed.* The great object of Mr. Elkington's system, is that of draining such bogs, by cutting off entirely the source of the springs or subterraneons water which causes the wetness, either by flowing over the surface, or by its being long confined under it. If the springs have a natural outlet, the object of the drain is, to lower and enlarge it, which, by giving the water a more free and easy channel, will soon discharge and draw it off; or will reduce it to a level so far below the surface as to prevent its overflowing it.

Where the springs have no apparent outlet, but are either confined so far below the surface, as to injure it by constant moisture, or by oozing out imperceptibly through any small pores of the upper soil; the object of the drain is, to give a proper vent to that water, and to extract more quickly and more effectually what has before been pent up in the bosom of the soil. The object of the auger, which, in many instances is the *sine qua non* of the business, is simply to reach or *tap* the spring, and to give vent to the water thus pent up, when the depth of the rain does not reach it, where the level of the outlet will not admit its being cut to that depth, and where the expense of cutting so deep would be very great, and the execution of it very difficult.

According to these principles, this system of draining has been attended with extraordinary consequences in the course of Mr. Elkington's practice, which shall be more fully explained in the subsequent part of this report. By it, not only the land in the immediate vicinity of the drain, but also springs, wells and wet ground, at a considerable distance, have been made dry, with which there was no apparent communication.

As the whole depends upon the situation of the ground to be drained and the nature and inclination of the strata of which the adjacent country is composed; as much knowledge as possible must be obtained of these, before the proper course of a drain can be ascertained, or any specific rules given for its direction or execution. But all these circumstances will be more particularly explained in describing the parts of the operation with which they are connected.

From the American Farmer.

THE HESSIAN FLY.

This destructive insect is propagated from the eggs of the fly deposited on the grains of wheat when ripening; the truth of which I learned from actual observations. The fly may be seen by the middle of June, and from that time till wheat is cut, flying about and lighting upon ears of wheat. It deposits its eggs upon the outer ends of the grain, where they may be seen with a good microscope or optic glass—sometimes to the number of six or seven on one grain.

They remain there till the grain is sown.—The warmth necessary to produce vegetation is sufficient to animate the insect. It bursts its shell and enters the shoot, where it lies in a torpid state till the next spring, except in some instances when wheat is sown early, the fly commences its ravages in the fall; when this is discovered, the best method is to turn sheep upon it and pasture it short either in the fall or in the winter.

The most effectual way to check the propagation, is in preparing the seed before sown, which should be in the following manner:—Put your seed into a hogshead, tub or vat, and cover it with water; let it stand ten or twelve hours; then put off the water, put the wheat upon a barn floor and sprinkle lime over, and with a shovel mix it till it is well covered with lime. Let it remain in that state about twenty-four hours, and the eggs will be destroyed without any injury to the seed.

The following brief sketch of the observations which led to the discovery abovementioned, is given, that all who wish to be satisfied of the truth of it, may have ocular demonstration of the fact, if they will take the trouble. On viewing several grains of wheat in a microscope, something resembling the eggs of insects was observed upon them: twenty grains were selected with those appearances; they were put upon some raw cotton and a little earth in a tumbler of water, and observed every day; and on the day the grain opened and put forth its tender fibre, the insect burst from its shell and was not to be seen.

Ten days after, five of the grains with their roots and blades were taken from the glass and carefully examined. In three of them the insects were found. The other fifteen remained, and overspread the top of the glass. They were preserved till spring, when, on examining, every stalk had an insect in it, some two and one four.

Twenty other grains were selected, and the lime applied for twelve hours. It was then washed, and the color of the eggs was changed, and being put into a glass in like manner as the other, the wheat grew, but the eggs did not

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*Wetness of land is sometimes occasioned by the stagnation of water in the surrounding ditches, or in some adjoining hollow, where, for want of declivity in the former, and owing to the higher situation of the latter, it oozes out upon the lower ground, and finds its way into the open parts of the soil. This is frequently the case, where water is conveyed in a lead or artificial channel, the land lying lower and adjoining to it, being very often wet from that cause. The remedy for these kinds of wetnesses is simple, and points out itself.

*Many and various are the conjectures respecting the origin of peat bogs; into the merits of which, it would be needless to inquire. Some suppose them to have been formed at the time of the general deluge from the huge trees that are found in them, and from a variety of other circumstances that led to that supposition; but it is not so much the subject of this treatise to explain their probable origin, as the means by which springs or other accumulated water may be most easily cut off, from preserving them in their present unproductive state.

produce. The roots were transplanted, and grew well, and ten bushels of wheat limed as above, produced a good crop, while the neighboring fields suffered materially, and some were almost wholly destroyed by the fly.

A FARMER OF BUCKS COUNTY.

METEOROLOGY.

Mr. Skinner—As in our very dry seasons, the most of your readers are watching the winds and the signs, as they are termed, for rain, I have thought the following translation from a French work, called "Erreurs et Prejuges," might be acceptable to them.

"The Abbe Toaldo has demonstrated that in 1106 new moons, 950 have been followed by remarkable changes of weather. There are then 950 chances to 156, or what is the same thing, six to one that a new moon will produce a change of weather. The other phases have less influence. The full moon gives but five chances to one. The first and last quarters give but two and a half to one."—*Amer. Farmer.*

The useful properties of Charcoal, for sweetening the breath, cleaning the teeth, &c.

All sorts of glass vessels and other utensils may be purified from long retained smells of every kind, in the easiest and most perfect manner, by rinsing them out well with charcoal powder, after the grosser impurities have been scoured off with sand and potash. Rubbing the teeth, and washing out the mouth, with fine charcoal powder, will render the teeth beautifully white, and the breath perfectly sweet, where an offensive breath has been owing to a scorbutic disposition of the gums. Putrid water is immediately deprived of its offensive smell by charcoal.

To sweeten Meat, Fish, &c. that is tainted.

When meat, fish, &c. from intense heat, or long keeping, are likely to pass into a state of corruption, a simple and pure mode of keeping them sound and healthful is by putting a few pieces of charcoal, each the size of an egg, into the pot or saucepan, wherein the fish or flesh are to be boiled. Among others, an experiment of this kind was tried upon a turbot, which appeared to be too far gone to be eatable; the cook, as advised, put three or four pieces of charcoal, each the size of an egg, under the strainer, in the fish kettle; after boiling the proper time, the turbot came to table perfectly sweet and firm.

To purify fly-blown Meat.

It has been successfully proved, by many experiments, that meat entirely fly-blown, has been sufficiently purified to make good broth, and had not a disagreeable taste, by being previously put into a vessel containing a certain quantity of beer. The liquor will become tainted, and have a putrid smell.

USEFUL INVENTION.

Mr. Ralph Bulkley, of this city, has submitted to our inspection a specification, accompanied with a diagram, of an improvement in the manufacture of salt by evaporation. As he intends to obtain a patent for his invention in England, we are not at liberty to give a description of his plan. From an examination of his papers, we are of opinion that the slow and tedious process of evaporation may be greatly accelerated by this improvement; and when we consider the vast quantities of salt which will hereafter be manufactured in the western counties of this State, and find a market thro' the medium of the Erie Canal, there can be no doubt but Mr. Bulkley's improvement in the manufacture of a staple commodity will be profitable to himself and beneficial to the public. It is said one of the proprietors of the extensive salt-works in Onondaga objected to the plan, *because it would make salt too cheap.* This objection would not weigh much with the great mass of the community.—*N. Y. Statesman.*

From Dr. Dwight's Travels.

On the 26th of September, three days after we passed through Portsmouth, on our journey in 1807, Colonel Walker of this town went out on a shooting excursion at 4 o'clock in the morning. For this purpose he embarked in a small boat with an intention of crossing the Piscataqua. When he had passed over about half the breadth of the river, a severe spasm seizing him in the head, sensibly affected his sight, but left him in full possession of his understanding.—Apprehending that his situation was dangerous, he immediately turned his course back towards the Portsmouth shore; and as the flood tide, then flowing with great strength, forced him up the river, he steered towards a small wharf about three fourths of a mile above the town. As the boat came near the wharf, he laid the end of a paddle, which he held in his hand, upon a corner of the wharf, in order to lay the boat by its side. But the tide forced him away. He then attempted to reach a rocky point, a few rods above; but while he was in the act of making a stroke with his paddle, by some accident or other he missed the stroke, broke the paddle, and fell into the river where it was about ten feet deep. As soon as he rose above the surface he endeavored to swim; but being unskilled in the art, and encumbered with his clothes and boots, found himself unable. When he perceived that he must sink again, he turned his face towards the shore, designing when he should reach the bottom, to make his way to the spot where he hoped to land, by creeping. Accordingly as soon as he felt the bottom, he made the most vigorous exertions for this purpose; and, when he rose again, had advanced so far towards the shore as to be able to raise his head above the water while his feet touched the bottom. He then walked to the shore, which he reached about an hour before the sun rose. Hence he ascended the bank and walked up the river with the hope of finding some person who might assist him to recover his boat.

To this time Colonel Walker had retained full possession of his reason; but, as he supposed, he now fainted and fell, and had afterwards no distinct recollection of his circumstances until a little before noon on Monday the 28th.—Still, he retained a remembrance, which he styles imperfect and visionary, of climbing over stone walls, groping in a cornfield, and endeavoring to reach his house before the news of taking up his boat should alarm his family.—The course which he took to find his house he could not remember; and probably did not contrive nor distinguish. But he evidently spent the whole of Saturday, Sunday, and a part of Monday, in attempting to find his way thither. The spasmodic affection which he mentions, the anxiety and flutter of spirits which he suffered during the while he was in and under the water, and the excessive fatigue occasioned by his extraordinary exertions to gain the shore, affected both his body and his mind in such a manner as to leave him absolutely bewildered. Two days he seems to have wandered in the cornfield and its environs; and two nights to have slept, if he slept at all, within the same narrow limits; and all this on ground which he must have familiarly known. After he had reached the town on Monday morning he made a variety of attempts by wandering through different part of it, as he afterwards remembered, to find the way to his own house; but failed in them all. About 5 o'clock, P. M. he was discovered and conducted home by some bakers in the neighborhood.

To this account, taken from Colonel Walker himself, Dr. Buckminster adds, "Upon coming to the bake house, to which he was probably directed by the light of the oven, Col. Walker asked the men whether they knew where he was, and who he was, and whether they could conduct him to his house. The bake house was in sight of the house of Col. Walker; and directly behind the church where he had worshipped for thirty years. After he came home he was put to bed. Within an hour I visited him and found him in a great degree of perturbation. He knew me however, as he had known his wife, and several of his family, at his first coming home. But he could not be convinced that it was Monday, and not Saturday morning. In my hearing he urged his wife to send a messenger unto a company of men who under his superintendence were working on a road, to tell them that he was unable to give them directions, and they must therefore disperse. Within a few days Col. Walker was so far recovered as to attend to his customary business, and not long after regained his usual health."

I have recited this story because it exhibits man in an attitude, which, so far as known, is absolutely new.

THE FARMER.

It does one's heart good to see a merry round-faced farmer. So independent, and yet so free from vanities, and pride. So rich, and yet so industrious—so patient and persevering in his calling, and yet so kind and social and obliging.—There are a thousand noble traits about him, which light up his character. He is generally hospitable—eat and drink with him and he won't set a mark on you, and sweat it out of you with double compound interest, as some I know will—You are welcome. He will do you a kindness without expecting a return by way of compensation—it is not so with every body. He is generally more honest and sincere—less disposed to deal in low and underhand cunning, than many I could name. He gives to society its best support—is the firmest pillar that supports the edifice of government—he is the lord of nature. Look at him in his homespun and grey backs—gentlemen! laugh at him if you will—but believe me, he can laugh back, if he pleases.

The young oak, to be a useful tree, must not be reared in a hot-bed. Indulgence in the education of young people often spoils them.

Extracts from an able article which commences the last No. of the Massachusetts Agricultural Repository, entitled "Editorial Remarks, by John Lowell, one of the Editors."

"We are reproached with introducing articles which are above the capacity of common farmers. If it be intended as an intimation that we devote too large a proportion of this work to philosophical agriculture, we deny the fact; we always give the preference to homebred, practical essays and experiments. But we are not ready to admit that the introduction of rational and scientific speculations, such as those of Kirwan and Davy is inexpedient. Massachusetts has scarcely a town which does not furnish educated men. Knowledge must be first communicated to them, and from them it will inevitably reach their less informed neighbours. We have devoted many pages to horticulture, to the best mode of raising vegetables and fruits for the table, and if we wish to rise one grade above mere subsistence, we must continue so to do. We shall devote a considerable portion of our journal to horticulture, orchards, and fruits. Massachusetts has fourteen large towns containing a population of one hundred thousand souls. When men are thus collected in great messes they will require the innocent luxuries of the table, and there are none more so than vegetables and fruit. To supply this population of one hundred thousand souls, fifty thousand at least must be employed. Thus nearly one third of the state are interested in acquiring horticultural information, in being taught to manage their gardens. Would you always continue in your present state of ignorance on these subjects? Shall it be said that from June to September in our scorching summers, a traveller may traverse Massachusetts from Boston to Albany, and not be able to procure a plate of fruit, except wild strawberries, blackberries, and whortleberries, unless from the hospitality of private gentlemen? It is painful to reflect, that every cottager in Flanders, Germany, Holland and England, is better supplied with summer fruit than our most opulent farmers.

This almost utter neglect of cultivating summer and winter fruits, materially injures the health of our farmers. How mortifying to see the finest climate for the cultivation of the apple, so undervalued, that many of our farmers are obliged to slice up their summer fruit, and suspend it in the front of their houses to dry, in order that they may have a comparatively insipid and tasteless provision for winter! Yet such is too often, I may say too generally, the case.

The greatest benefit, however, which our farmers would derive from an attention to gardening, would be the acquisition of habits of care and neatness, which would be transferred to their farms.

If each farmer would devote two acres to a garden, and to fine fruits, he would be compelled to be more careful in trimming his trees, in sowing his seeds, in keeping them free from weeds. The habits thus formed would extend throughout his estate. We see this effect in farmers near the great towns; they learn to be their own grafters, and pruners, and their care of their general culture keeps pace with their progress in gardening.

But perhaps it will be replied, we cannot afford the time; it will be too expensive. What! cannot our farmers afford as much time as the common labourers of other countries who work from sunrise to sunset for from thirty to forty cents per day? No, this is not the real difficulty. It is that the ease of getting an ample support in this country relaxes our exertions. But the progress of manufactures and population will soon bring about other habits, and we hope within a few years to see nurseries of the cherry, and the peach, and the pear, as well as of the apple, in all country towns,—though we think, not only that the last is far the most important, but that it is with that our internal improvements must commence. Till every farmer can lay up his ten barrels of excellent winter apples for his *own use*, we shall not expect much progress in other branches of gardening."

From the Acadian (Halifax) Recorder of June 21.

DRILLING MATCH.

On Friday last, the 13th inst. this match took place at Willowpark. At 10 o'clock the ploughmen began to muster, and by half past 11 all the prior arrangements were completed by the committee. The length of the field being 80 rods, a breadth of 17½ feet sufficient for seven drills, was measured off for each competitor.—Before starting, H. Yeomans, Esq. gave the six candidates who presented themselves, an opportunity of drawing their respective tickets—marked in running numbers, and by which their lots was to be ascertained. They then proceeded to adjust the poles to their own satisfaction, which had been previously set up under the inspection of J. Albro, Esq. the other gentleman of the committee. The rules prescribed to the workmen were simply these; to draw on each lot seven drills at two feet and a half apart, from centre to centre—to sink the plough to the depth of from 6 to 7 inches—and lastly, to execute with all dispatch, as time would be taken into account by the judges, all other circumstances being equal. Mr. Henry Oliver performed his task with the greatest expedition, being finished in 1 hour 20 minutes, which was at the rate of an acre in 2 hours and a half; and the longest time taken by any of the others was 1 hour 55 min.—equal to 3 hours 34½ min. to the acre.

Lot 1 was drilled in			1 hour	25	minutes,
2	do.	do.	1 do.	50	do.
3	do.	do.	1 do.	55	do.
4	do.	do.	1 do.	50	do.
5	do.	do.	1 do.	20	do.
6	do.	do.	1 do.	52	do.

This table is exhibited, and these facts mentioned, to bear witness of the rapidity and execution of which the drill system is susceptible. Three hours may be assumed as a fair medium in such a field for preparing an acre for the reception of the manure and the potatoe sets, and a similar portion of time will more than suffice to cover them in. According to this way of reckoning, it will only take six hours to put an acre of potatoes into drills; and allowing afterwards three separate hoeings with the proper machinery at the rate of three hours each, altogether 15 hours, will be requisite to cultivate an acre according to the new plan. During the one half of this time a pair of horses, and during the other half a single horse only will be needed. There can be no comparison, on the score of cheapness, between this and the old manner of raising potatoes with the hand hoe; keeping out of view the more entire pulverization, and the more thorough destruction of weeds effected by the implements.

At half past one o'clock all the ploughs were stopt as a preliminary to Messrs. Anderson and Blayse coming on the field as judges, to examine the work and determine the prizes. By 2 o'clock they gave in their report, which was immediately handed to his Excellency the Governor, that he might deliver the medals and money to the victors.

The 1st prize, No. 6, to Mr. John Baird, servant to W. Lawson, Esq. a silver medal and	£2 10 0
The 2d prize, No. 1, to Mr. Isaac Pringle, servant to Messrs. Tobins, a silver medal and	2 00 0
The 3d prize, No. 2, to Mr. John Cline, Jr. a silver medal and	1 10 0

His Excellency then called for the Judges to thank them for their attention, adding that he was satisfied they had determined according to the best of their ability, and he trusted their decision would be generally acceptable.

On this drilling match one observation deserves to be recorded. Three years ago when this system of competition was first proposed, the system of drilling was in its infancy; the workmen, with the exception of those trained in the mother country, were strikingly imperfect. The method of drawing straight lines by the erection of poles was unknown to most of the natives of the country who had been accustomed to the use of the plough from their youth, and who reckoned themselves tolerable proficients. The first drilling match therefore on the peninsula gave evidence of this low state of the art, among our native ploughman. A visible improvement was effected in the second, but in the present one, which is the third, two Nova Scotians handled their implements with the skill of a master, and one of them was fortunate enough to carry off a prize.

In fact, the very worst work done on last Friday was equal to the best of any of the former exhibitions; and the whole field, consisting of ten acres, 80 rods long, and 20 wide, and containing in all 128 drills, is a very creditable and even highly excellent specimen of what can be accomplished. Eight different ploughmen have assisted in completing it, and so straight are the rows and equidistant, that it appears to be laid off rather by a garden line, than by the free, easy and unrestricted motion of the plough under the guidance of the eye. The Lothians of Scotland, where all the processes of tillage are carried to the highest acme of perfection, can seldom present a finer and more finished display of drilling; and the curious in the art would do well to inspect the field in question, as redounding much to the honor of the performers.

The minor societies should direct a part of their attention to this subject. They have, with a commendable zeal, instituted ploughing Matches every where, and have reported favorably of the result; it is now high time, that drilling be more thoroughly understood in the country; for it is an incontestible fact, that no man can be a first rate ploughman, who is ignorant of this other art; nay more, that no field can be properly and skilfully tilled, unless the ridges be first marked off by parallel lines at given distances, which lines must be drawn by

the aid of poles on the same general principles. On all these accounts, it is highly deserving of cultivation, consequently of the patronage of the societies. Let them give it countenance, and in a short time the youths of the country will be able to enter the lists and stand a competition with the drillers of G. Britain who are amongst them. JOHN YOUNG, *Secretary.*

POT AND PEARL ASHES.

In one of the late numbers of Tilloch's Philosophical Magazine, is the following paragraph, announcing a discovery, which, if real, may have a serious effect on the commerce and pursuits of many in the United States.

"I observed, says he, many years ago, that I expected to see the powers of galvanism, in one shape or other, a necessary appendage to the apparatus of every bleach field. Subsequently, I stated that I considered all alkalies, alkaline earths and substances, were modifications of the same base, and that one day I hoped to see our potash taken from the *lime rock* of our own soil, instead of deflagrating the woods of America. After many varied experiments, I have completely succeeded, and have now rendered myself and my country, so far as regards bleaching, perfectly independent of every foreign aid, and at an expense comparatively trifling."

GLUE.

It has been erroneously stated in the public papers, that India rubber will make good glue; but it will never harden. For a strong, firm, cheap glue, nothing has yet been discovered superior to the best kind of that which is in general use; and for a fine, clear, and transparent kind, which will even unite glass so as to render the fracture almost imperceptible, nothing is equal to isinglass boiled in spirits of wine.

Amer. Farmer.

NEW ENGLAND FARMER.

SATURDAY, JULY 26, 1823.

Farmer's and Gardener's Remembrancer.

JULY.

Stubble Fields.—As soon as you have completed your harvesting, plough your stubble fields. You may plough in your stubble, or you may burn it off and then plough the land. The last mode of proceeding has been recommended by English writers. They say that the ashes affords a good dressing to the soil, the heat destroys insects, and the fire, by burning the stubble, removes an impediment to the plough. We have heretofore taken notice of an experiment, which proved the advantages of this mode of proceeding, in our first No. page 6. But as we have readers, who, probably, have not seen or taken particular notice of that article, we will repeat the substance of it. Mr. W. Curtis, of Lynn, Norfolk, found very beneficial effects from burning the stubble of oats, which was left eighteen inches high for that purpose. On a field broken up from old pasture the same year, he afterwards sowed wheat and oats in succession on the same ground, the stubble of both which was burned in the same manner. The ashes, in every case, were ploughed in, to a small depth, and the verges of the fields mowed to prevent accidents. After the third crop of corn [grain] all of which was abundant and remarkably free from weeds, the field was laid down with clover and other grass seeds, and the ensuing crops proved infinitely finer than those before the ground was broken up.

Another piece of ground was cropped for three successive years in the same manner as the first, to which it was similar in every respect of soil, aspect, and previous management, but in which the stubble was ploughed in, instead of being burned; the produce of each crop on it was much inferior to that of the first experiment, and the weeds increased so greatly, that in laying it down to grass, they quite overpowered the grass seeds, so much so, that it was necessary to re-sow it; and ever after, while Mr. Curtis held it, the grass and hay produced were coarse and full of weeds; and consequently inferior both in value and quantity to those of the other field, on which the stubble had been burned.

It may, perhaps, be well in burning stubble fields, not only to mow the verges or borders of the fields, and rake the proceeds inwards towards the centre of the fields, but to trace a furrow round the whole, and set your fire inside of the furrow. A calm afternoon, towards sunset, should be preferred, when the wind will not be apt to rise, and cause damage by the fire.

We do not learn what was the nature of the soil on which the experiments of Mr. Curtis were made; and should not, therefore, recommend a similar practice on all soils, for general adoption, at least without further trials on a small scale. If the crop of grain was on a stiff stony soil, or on land which presents material impediments to the plough, the stubble should in some way be got rid of, before any attempt is made to plough the field. Dr. Deane advised to dispose of the stubble on stiff lands by mowing it, and carrying it to the farm yard. For "such land, when ploughed, is not apt to cover the stubble so closely as to cause it speedily to putrefy. It will often lie in a sound unaltered state for a long time, and be very troublesome at the next ploughing. But if the ground should be seeded after one ploughing, it might be expected the stubble would render the land so hollow and cavernous as to starve many of the plants that grow on the surface. At the same time these hollows would be receptacles for noxious insects and vermin. But in a light sandy soil, the stubble is soon reduced to a condition to nourish vegetables." In such a soil it would, therefore, probably be best to plough in the stubble as soon as possible after harvest, before the sun and wind has robbed it of all its juices, and taken away its power to enrich the soil.

It has been recommended previous to ploughing in stubble to pass a heavy roller over the field to lay the stubble flat on the surface. If this expedient is adopted, great care should be taken to pass the roller the same way the plough is to go. Others advise to annex a small roller to the fore end of the plough beam. A foot piece, or piece of timber, with a mortice in it, through which the fore end of the plough beam is passed, so that the piece of timber stands perpendicular, and the lower end scrapes along on the ground, may be so contrived as to regulate the depth of ploughing, make it uniform, and at the same time greatly assist in clearing the way before the coulter. But we believe the most effectual contrivance for preventing a plough from clogging, is what is called a "Plough Cleaner," invented by Mr. Joseph Kersey, of Pennsylvania, of which we have given a drawing and description in page 407 of our paper. It consists of a piece of timber, pinned to the plough beam, just before the coulter, with a staff or handle attached to its upper end, so placed as to come within reach of the ploughman, who by pulling the handle, turns the piece of timber on the pin, and causes the lower end to scrape the ground just before the coulter, and thus remove stubble, weeds, and other obstacles to smooth ploughing. This is as simple as it is useful, and has, we are told, been used for several years in Pennsylvania, and found "very convenient."

Harrow, Roll, and Top Dress your Mowing Ground.—Mowing land, after it has been laid down a few years to grass, becomes bound, or too thickly swarded, and will produce but little. It may not always be convenient, and is often not advisable, to break it up. In such case, after a plentiful rain, go over your mowing ground with a scarifier, spiking roller, or heavy loaded harrow. Then dress it with some kind of compost in which earth is a principal ingredient. Next pass a heavy roller over the land, unless it be uneven or stony, in which a roller would prove of little or no benefit. Half rotted strawy manure, spread on grass ground is of little service, and the dung of swine or of horses thus applied, will be dried up by the sun and air with but little benefit to the soil or to the crop. If you have on your premises a pond or mud hole, the bed of which is partly uncovered in a dry season, you may take the first leisure time after haying and harvesting, either to cart it into your barn yard, or spread it on your grass ground. It has been recommended by writers, as well as practical farmers, to apply your manure to grass land, especially where a second crop is expected, immediately after mowing the first crop. But in such case it will not answer a good purpose to make use of unmixed dung, or what is called putrescent manure of any kind, as the sun will not only dry it up, but scorch the grass. Compost manure, ashes, soot, &c. loose little if any thing by exposure to the air, but spreading unmixed dung on grass land is a very extravagant way of using it.

Save your Summer Manure.—Wherever your cattle are confined every night, as is advisable, it will be but little labor to shovel the manure every morning into a heap or heaps, which should be immediately covered with fresh earth, peat, or some other substance which will prevent its being dried up by the sun, or washed away by the rain. If you keep a horse or horses in a stable, or soil your cattle, it will often pay for the labor to mix earth every day or two with the fresh manure, which will prevent any part of it from being lost by evaporation. Place a few loads of earth near the place where your stables are emptied, or in the enclosure where your cattle are yarded, and from time to time mix such earth with the fresh dung, which will prevent its being weakened, dried, or washed away. If you keep your swine confined in pens, you should be careful as you empty their styes to mix earth with the manure thus obtained. Horse manure, more particularly, will heat, or become "fire fanged," as it is called, without such precaution. You may have first a layer of earth, then of manure, and then again of earth. Sir John Sinclair says,

"In farm yards, where there is an opportunity of making cattle, horse, and hog dung, it is always to be preferred, as the one corrects the defects of the other, and prevents the fermenting process from going too rapidly forward.—These substances should be laid *stratum super stratum*, [one layer above another] which can easily be done every day, when the stables, cow houses, and hog styes are cleaned out. If a little earth can be put between each stratum, so much the better." Even in your pastures, if you have plenty of help, or boys who run the risk of being idle, it will be best, especially near watering places, places where your cattle are salted, &c. to gather frequently their droppings into little heaps, and cover them with earth, or sods of grass, with the grass side down. The whole may be carted to your large manure heaps, compost beds, stercoraries, &c. or applied, if sufficiently rotted or fermented, to your grass ground, as a top dressing in autumn. This would be what we call *neat farming*, and a *slovenly farmer* will not thrive.

Do not forget to give Salt to your Cattle, Horses and Sheep.—One would think that foreign writers had not, till within a few years, been aware of the use of salt as an article in the diet of domestic animals. Sir John Sinclair (Code of Agriculture, page 56) mentions it as something remarkable, that "in America, salt is given to cows, oxen, horses and to sheep, but not to pigs." He also says that "lumps of rock salt might be kept in troughs, protected against the effects of rain in the fields, by covers, but accessible to sheep or cattle." It appears that a patent has been obtained by Messrs. Martin and Co. in England, for a peculiar mode of preparing salt in large cakes, by which it is rendered less liable to melt and waste by rain than common salt. It is recommended to allow calves, especially, to have constant access to fine salt, to be kept in a trough near them, separate from their other food. It is said that it prevents and cures the rot and flukes in sheep; and prevents injury to stock by moist feed. Likewise, when horses are afflicted with salivation, or a running of saliva from their mouths, salt will mitigate if not cure their complaint. Some writers say that twice a week during the summer is often enough to give salt to any domestic animals. Sir John Sinclair asserts that "the quantity given in spring, summer, and autumn, to oxen and milch cows, is about a quart to each every two or three days, in very hot weather. In cooler seasons it is only given once a week." We are inclined to think this a liberal allowance. But if salt is kept in troughs under cover, where they can have free access to it, we do not believe they would be apt to consume more than would prove for their benefit.

Late Peas.—We think it very possible that peas may be raised, by proper management, during the whole summer, and till severe frosts commence in autumn. The evil, which has usually attended late sown peas, and rendered it impracticable to raise them to much advantage after about mid-summer, has been their liability to *mildew* or *rust*. "Both in Europe and America, the pea sowed for an autumnal crop, is generally, we might say almost universally, subject to mildew, so that we cannot enjoy this delicious green vegetable for more than two months in the year." A very valuable paper "On the prevention of Mildew, in particular cases: by Thomas Andrew Knight, Esq'r. F. R. S. &c. &c. President of the London Horticultural Society," was published in London, and re-published in the last No. of the Massachusetts Agricultural Journal. The author of this paper adopts the opinion of the venerable President of the Royal Society (the late Sir Joseph Banks) that mildew is a species of plant, which botanists call fungus, and which grows on wheat, peas, some sorts of grass, &c. and robs them of a part of their nourishment. That this plant has its seeds, like other plants, which seeds are excessively light and capable of being dispersed every where by the wind. The author then proceeds to point out the means by which the injurious effects of the common white mildew may be in particular cases prevented, as follows:

"The secondary, and immediate causes of this disease have long appeared to me to be the *want* of a sufficient supply of moisture from the soil, with *excess* of humidity in the air, particularly if the plants be exposed to a temperature below that to which they have been accustomed. If damp and cold weather in July succeed that which is warm and bright, without sufficient rain to moisten the ground to some depth, the wheat crop is generally injured by mildew. I suspect that in such cases, an injurious absorption of moisture by the leaves and stems of the wheat plants takes place; and I have proved, that under similar circumstances much water will be absorbed by the leaves of trees, and carried *downwards through their alburnous substance*; though it is certainly through *this* substance that the sap *rises* under other circumstances. If a branch be taken from a tree when its leaves are mature, and *one* leaf be kept constantly wet, that leaf will absorb moisture, and supply another leaf below it upon the branch, even though all communication between them through the *bark* be intersected; and if a similar absorption takes place in the straws of wheat or the stems of other plants, and a retrograde motion of the fluids be produced, I conceive that the ascent of the true sap, or organizable matter, into the seed vessels, must be retarded, and that it may become the food of the parasitical plants, which then only may grow luxuriant and injurious.

"This view of the subject, whether true or false, led me to the following method of cultivating the pea, late in autumn, by which my table has been as abundantly supplied during the months of September and October, as in June or July, and my plants have been as nearly free from *mildew*.

"The ground is dug in the usual way, and the spaces, which will be occupied by the future rows are well soaked with water; the mould upon each side is then collected so as to form ridges seven or eight inches above the previous level of the ground, and then are well watered. After which, the seeds are sowed in single rows along the tops of the ridges. The plants very soon appear above the surface, and grow with much vigor, owing to the great depth of the soil and abundant moisture. Water is given rather profusely once a week, or nine days, even if the weather proves showery.—Under this mode of management the plants will remain perfectly green and luxuriant till the young blossoms and the seed vessels are destroyed by frost, and their produce will retain its proper flavor which is always taken away by mildew. The pea which I have planted for autumnal crops is a very large kind, of which the seeds are much shrivelled, and which grows very high. It is now very common in the shops of London, and my name has been, I believe, generally attached to it. [It is well known by us by the same name, and is an excellent late variety.—*Ed. Ag. Journal.*] I prefer this variety, because it is more sweet than any other, and retains its flavor better late in autumn. It is my custom to sow some of it every ten days, and I rarely ever fail of having my table supplied till the end of October."

CLOSE OF THE FIRST VOLUME.

The present number completes the first volume of the New England Farmer, and with the next we shall commence a second volume, with renovated exertions, and hopes invigorated by some degree of apparent success, which has attended our past labors. We are told that our efforts have been in some measure acceptable, and the cheering sound of "well done," will excite us to summon all our powers, and put all our faculties in requisition to render ourselves still more "useful to the farming interest."—New sources of agricultural information are daily unfolding before us, and all that our industry can accomplish, aided by an undissembled fondness for the science and predilection for the pursuits of the art which is paramount to all other arts, we unhesitatingly promise to perform. The Editor hopes and expects to be able hereafter, as long as the patronage of the public and his own capacity for intellectual toil shall continue, to devote himself *more entirely* to the object of rendering his paper worthy of the approbation of the enlightened cultivator, than has hitherto been practicable. He proposes to explore new fields of agricultural information, with an inquisitive, if not with a discerning eye, and the result of his researches will be faithfully submitted to the consideration of that greatest and most important class in the community, to whose interests the New England Farmer is principally devoted. As he continues his *work* he promises every endeavor to become a better *workman*, and hopes eventually to become a *profitable*, as he proposes to be a diligent laborer in the *great field of Agriculture*.

We respectfully solicit the continuance of the favors of correspondents, and return our sincere thanks for such as we have already received. We wish to collect for the use of the public, *the fruits of actual experience*. Theories and ingenious speculations *may be useful*, but facts judiciously selected and accurately reported *must be useful*. We likewise are very solicitous not to publish any thing which may *mislead* the practical farmer. Our intentions are upright; but "to err is human." For instance, should the Editor, or any of his correspondents, recommend any plant, or any process of cultivation, which any of our friends, who are better in-

formed on the subject, know or believe not to be useful, it might be rendering a service to the public, and would certainly be very acceptable to us, to point out our mistake, which shall be promptly and thankfully corrected.

The Index to the first volume will be published in a few days, and immediately forwarded to those who have taken all the numbers.

A few of our subscribers have requested to have the paper discontinued at the close of the first volume, who have neglected to pay for it; but it is our invariable rule not to discontinue any paper *until all arrearages are paid.*

INFORMATION WANTED.

A friend of the Editor is solicitous to be informed at what time in the year it would be most advisable to cut *chesnut wood*, designed for fencing, in order that the timber, and especially that part of the posts, which is set in the ground, may possess the greatest durability. Mr. Preston of Pennsylvania, in his valuable communication published in our paper, No. 45, page 354, intimates that hemlock cut and peeled at the season of its peeling the second time, or in October, will be the most durable. Perhaps he may be able, and will be so good as to inform whether the same rule will apply to chesnut. And it may be that some other gentlemen friendly to the farming interest, will favor us with their experience or opinions on this subject, which would be thankfully received, and may prove beneficial to the community.

FOREIGN.

The last arrivals from Europe have brought advices from London to the 8th, Lisbon the 13th, and Paris the 5th of June. From these it should seem that the French have apparently succeeded in re-establishing the ancient order of things in Spain, and the hopes of the Constitutionalists are blasted, and the fears of the friends of liberty realized. We have another "confirmation strong" that an ignorant and superstitious people cannot be a free people. That knowledge is necessary for the enjoyment of rational liberty; and a tiger loosed from his chains is not more incapable of self-government than the highest and the lowest orders of the people in Spain. The middle class appears to want union, number, energy, courage, and perseverance, and this attempt to shake off their shackles, will, we fear, end in the addition of heavier and stronger incumbrances.

Should we attempt to give details of what are styled "War operations in Spain," we should fill our columns with petty affairs of posts and skirmishes, which end in nothing but submission to the will of dictators, who have succeeded in dragooning Spain into that despotism which she would have escaped if she had not merited it. It was not the will of the Spaniards to be free, and therefore they are not free. They court their chains, and love darkness better than light; they must therefore remain the unpitied victims of tyranny and bigotry, and will probably sink the deeper in the mire of despotism in consequence of their late feeble and ineffectual struggles to place themselves on high ground, and gain a respectable standing among powerful and civilized nations.

On the 20th of May, the French army appeared before Madrid, in consequence of a previous convention that it should enter the city. But this was not effected peaceably as had been anticipated. The French account states that the men, women, and children, who went to meet and welcome General Bessieres, the Royalist commander, were fired upon from two masked cannon loaded with grape, and were charged by the Constitutional cavalry, when nearly three hundred of these poor people, composing fathers, mothers, brothers and sisters, many of them mere children, were massacred without pity, &c. The Spanish accounts make the Royalists the aggressors, and tell us that General Bessieres declared that he was accustomed to victory, and determined to enter Madrid, even if he must do it by main force. A general action ensued, in which the Spaniards lost 80 killed, and 700 made prisoners and wounded.

The Spanish forces appear to be scattered like flocks of sheep without shepherds. The Spanish commanders have as little efficiency or concert as so many *bell wethers*. The new Spanish government is organized under French auspices at Madrid, has passed several decrees, and appointed ambassadors to the courts of Europe.—The road to Seville, the new capital, appears to lie open to the march of the French armies, and what is called the cause of legitimacy seems every where to triumph.

Portugal.—In this country a counter-revolution commenced on the 27th of May, under a certain General named Sepuleda. The young Prince, at the head of a regiment of troops, marched into Lisbon on the 3d of June, and was welcomed by the people with the cry of "long live the King." The Cortes were dissolved and fled. The next day the King denounced the Cortes as a set of usurpers and hypocrites, and proclaimed their dissolution as a body. He likewise issued a proclamation announcing the restoration of the Ancient Monarchy. This counter-revolution suits the highest and lowest classes of the people, viz. the froth and the dregs of the community. But the middling class, the farmers, and others of the more substantial part of society, are greatly dissatisfied. Several of the most active members of the Cortes have embarked for England.

An arrival at New York from Gibraltar, has brought papers from the last mentioned place to the 7th June. These furnish articles from Seville of somewhat later date than had been received when the above was written. There are some glimmerings of hope for the Spaniards, derived from this news, which, perhaps, may brighten into sunshine. The French and Spaniards have had an encounter at Talavera, in which the latter conducted with gallantry, and gave their opponents a sample of the times, when Bonaparte was baffled, and his troops taught "the manual exercise of heels." It was, however, but a *brush*. The loss of the Spaniards was "confined to 10 or 12 wounded," and that of the French was said to be greater, but probably did not amount to any considerable number.

DOMESTIC.

The Sea Serpent again exhibited himself on the 12th inst. near Nahant, with his usual bunches and other appendages and appurtenances "resembling a row of porpoises, proceeding with an undulating motion like that of a caterpillar," &c. He was seen, and his appearance attested to by Francis Johnson, Jr. Mr. J.'s testimony on this subject was given in presence of some very respectable gentlemen in this vicinity, viz. H. A. S. Dearborn, Nathaniel Amory, Sidney Bartlett, Richard D. Harris, Thomas Whitmore and Russel Jarvis; and these gentlemen have published a certificate, that from their knowledge of the character of Mr. Johnson, they have no doubt of his veracity. Serpents of this species are no strangers on the coast of Norway. The old editions of Guthrie's Geography mention their appearance, as well as many other and later authors, whose testimony, in corroboration with what has been frequently seen off our own coast, must render the existence of this species of monster no longer doubtful.

Thunder Storm.—On the 11th inst. Northampton and the towns in its vicinity were visited with a violent storm of thunder and lightning. The house of Mr. A. Wright, of Westhampton, was struck, and the timbers, partitions, 100 panes of glass, and much of the furniture were broken. There were ten persons in the house, but providentially only one, a lad, was injured. He was knocked down, had his hat rent, his jacket and shirt torn, and his flesh singed; but has now the appearance of recovery. A house in Chesterfield was struck in the same storm, and much injured.

Fires.—A fire took place in Philadelphia on the 17th inst. which destroyed eleven two-story frame houses, with all the back buildings, stables and sheds in Callow hill and Kunkle streets. A paper ware house, owned by the Bank of North America, a tobacconist factory, a chocolate factory, and a large tavern, were among the buildings consumed.

A range of buildings in Albany was destroyed by fire on the 13th inst. Loss estimated at from 12 to 15,000 dollars.

AGRICULTURAL PREMIUM, FOR THE BEST MANAGED FARM.

AT a meeting of the Board of Trustees of the Massachusetts Society for promoting Agriculture, held at the President's, 12th July, 1823, it was

VOTED, That this Society will grant as a premium *to the owner of the best cultivated Farm within the precincts of the several Agricultural Societies of the State*, the sum of Thirty Dollars each, in addition to the premium which may have been awarded the claimant by the local Society; and that it will accept, as full evidence of the merit of the claimant, a certificate signed by the President of the local Society, certifying that such person was declared by the Society or their Trustees, entitled to the premium within that district;—that the applicant shall, however, in all cases, be held to exhibit to this Society, a statement of the extent of his farm; the state and plan of his farming buildings; his mode of collecting and managing manure; the number of domestic animals usually supported thereon; the quantity and quality of land under cultivation, and his usual mode of culture, as well as the average amount of his crops, of all sorts.

A copy from the record,
BENJ. GUILD, *Assistant Rec'g Sec'y.*
July 18, 1823.

☞JOB PRINTING neatly executed at the Farmer Office, on reasonable terms.

PRICES OF COUNTRY PRODUCE, &c.

[Revised and corrected every Friday.]

		FROM D. C.	TO D. C.
ASHES, pot, 1st qual.	ton.	135 00	
pearl do.		145 00	
BEANS, white,	bush	90	1 00
BEEF, mess, 200 cwt.	bbl.	9 00	9 50
cargo, No 1,		8 25	8 50
" No 2,		6 75	7 00
BUTTER, inspect. 1st qual.	lb.	11	12
" 2d qual.		9	10
small kegs, family,		13	14
CHEESE, new milk		7	8
FLAX		8	9
FLAX SEED	bush	75	80
FLOUR, Baltimore, superfine,	bbl.	7 75	7 87
Genessee		7 75	7 87
Rye, best		4 50	4 75
GRAIN, Rye	bush	68	70
Corn		56	60
Barley		68	70
Oats		35	37
HOGS' LARD, 1st sort	lb.	10	11
HOPS, No 1,		8	12
LIME,	cask	1 25	1 37
OIL, Linseed, American	gal.	65	00
PLAISTER PARIS	ton.	2 75	3 00
PORK, Navy Mess	bbl.	12 00	12 50
Bone Middlings		14 50	15 00
Cargo, No 1,		12 00	12 50
Cargo, No 2,		11 00	11 50
SEEDS, Herd's Grass	bush	2 00	
Clover	lb.	8	9
WOOL, Merino, full blood, washed		55	60
do do unwashed		46	50
do 3-4 washed		50	55
do 1-2 do		46	47
Native do		37	40
Pulled, Lamb's, 1st sort		55	60
do Spinning, 1st sort		50	55
PROVISION MARKET.			
BEEF, best pieces	lb.	8	10
PORK, fresh		7	8
VEAL,		6	8
LAMB, per quarter		30	45
POULTRY,		10	14
BUTTER, keg & tub		13	14
lump, best		18	20
EGGS,	doz.	14	15
MEAL, Rye,	bush	75	80
Indian,		75	
POTATOES,		45	47
CIDER, liquor,	bbl.	1 50	2 25
HAY, best,	ton.	18 00	22 00

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SONNET.

I dreamed—I saw a little rosy child,
With flaxen ringlets, in a garden playing;
Now stooping here, and then afar off straying,
As flower or butterfly his feet beguil'd.

'Twas chang'd; one summer's day I stepp'd aside,
To let him pass; his face had manhood's seeming,
And that full eye of blue was fondly beaming
On a fair maiden, whom he call'd "his bride!"

Once more; 'twas evening, and the cheerful fire
I saw a group of youthful forms surrounding,
The room with harmless pleasantry resounding;
And in the midst I marked the smiling Sire.—

The heavens were clouded!—and I heard the tone
Of a slow moving bell—the white hair'd man was gone!

BERNARD BARTON,

Alias the Quaker Poet, with whose charming productions our columns have been frequently enriched, is not one who mechanically strings verses together, but a writer of genuine poetry. And however paradoxical it may appear to those who can relish nothing but what savors of titled rank, it is nevertheless true that Barton has presented the literary world with some gems from Parnassus which sparkle with a brilliancy not often surpassed. In speaking of the poets of the present day, in "A Sketch of Old England, by a New England Man," the author of that most excellent work, which ought to be read by every American, says—

"There is one modest bard here, that deserves to be mentioned as a novelty. I mean the Quaker, Bernard Barton, who has been moved lately by the spirit of poetry. As might be expected, he writes with sweetness, simplicity and good sense; the two latter very rare commodities at present in poetry, when the bards of England go abroad to write, and bring home all the fervid heats of a tropical sun, backed by the scorching sirocco of the desert, to excite us into a proper degree of poetical enthusiasm.—Friend Bernard's poetry is tender without exaggeration, and simple without childishness. His Pegasus is neither an elephant, a camel, nor a dromedary, but a horse of good pace and habits. In a better age of poetry he would be more admired. As it is, his Muse wants a few of the buttons of the honourable band of gentlemen pensioners to make her shine, and is, moreover, rather *drab-colored* for the present flashy taste."

PUNCTUALITY.

President Washington was the most punctual man in the observance of appointments, ever known to the writer. He delivered his communications to Congress, at the opening of each session, in person. He always appointed the hour of twelve at noon for this purpose: and he never failed to enter the hall of Congress while the State-house clock was striking the hour. His invitations to dinner were always given for four o'clock, P. M. He allowed five minutes for the variation of time-pieces; and he waited no longer for any one. Certain lagging members of Congress sometimes come in when dinner was nearly half over. The writer has heard the President say to them, with a smile, "Gentlemen, we are too punctual for you—I have a cook who never asks whether the company has come, but whether the hour has come."

From the N. York Medical and Physical Journal.

PIGEONS.

Extract from "Remarks on the Columba Migratoria, or Passenger Pigeon," by the Hon. De Witt Clinton.

The Columba Migratoria, or Passenger Pigeon, is a bird peculiar to North America. It extends its migrations from Hudson's bay to the gulf of Mexico, and it occupies occasionally that vast region which reaches from the gulf of St. Lawrence to the Rocky Mountains. Its change of residence is not owing to the influence of heat or cold, of rain or drought, but is made with a view to the acquisition of food. The vast flocks in which this bird congregates, are unequalled as to extent. La Hontan says that the bishop of Canada has been forced to exorcise them oftener than once, on account of the damage they do to the products of the earth.—Weld, an English traveller, speaks of a flock eighty miles long, flying over lake Ontario; and Wilson, the great ornithologist, estimates one seen in Kentucky 240 miles long, a mile broad, and containing 2,230,272,000 pigeons, which would consume on a moderate allowance 17,424,000 bushels of mast, [beech nuts and acorns] a day.

The gregarious habits and vast flocks of this bird will of course occasion a correspondent consumption of food; and it is therefore compelled to be constantly erratic, and to be among the feathered race what the nomades [wandering shepherds] are among mankind. The rapidity of its flight is superior to that of the carrier pigeon, which has been known to pass from St. Edmundsbury to London in two hours and a half. At this rate, the Passenger Pigeon can travel seven hundred miles in twenty-four hours; and at the rate of a mile a minute, the same distance in less than twelve hours;—and this velocity may account for undigested rice being found in its craw six hundred miles from the rice fields: but as this has been observed in the spring of the year, it must have been derived in that case from the gleanings of a former season, or procured at a greater distance, or confounded with the zizania aquatica of the western waters.—The favorite food of this bird is the beech nut, and it prefers to establish its roosting quarters and its breeding place within the reach of this aliment. It also subsists on the acorn, chesnut, wild cherry, seeds of the red maple, and of some weeds, poke, and other kinds of berry, buckwheat, and the principal cerealia [grain.] It resorts to the sea-shore and the salines of the west for salt, and it is frequently seen at the mineral springs of Saratoga enjoying the luxury of the waters.

MISAPPLICATION.

The following very good advice is extracted from Cicero's celebrated treatise De Officiis.

Two faults are to be avoided in the truly honorable and natural investigation of knowledge and science. The first is, that we should not take hypothesis for facts, and inconsiderately give them our assent. The other is, that many bestow too great labor on points obscure and difficult, and at the same time unnecessary. Which faults avoided, whatever diligence and care may be bestowed on subjects honorable and worth acquiring, will meet with just commendation.

RUINS OF BALBEC.

Dr. Richardson, who visited the ruins of the magnificent temple at Balbec, in Syria, in his late travels, is of opinion that this was first built by Solomon, and rebuilt by the Romans. The workmanship of the bottom stones is similar to that of some that were cut at Jerusalem in the time of that king. In the walls of this temple are some of the heaviest stones that were ever moved by human hands or human machinery.—Dr. R. measured one stone which was 67 feet long, 14 broad, and 9 feet thick; two others were nearly of the same dimensions, and the three were placed more than 20 feet above the foundation. In no other building on earth can such ponderous masses be found. This temple has been a place both of pagan and christian worship. The ruins are about 40 miles north of Damascus.

"I think there are two periods in the life of man in which the evening hour is peculiarly interesting—in youth and in old age. In youth we love it for its mellow moonlight, its million stars, its then rich and soothing shades, its still serenity; amid these we can commune with our loves, or twine the wreaths of friendship, while there is none to bear us witness but the heavens and the spirits that hold their endless sabbaths there—or look into the deep bosom of creation, spread abroad like a canopy above us, and look and listen till we can almost see and hear the waving wings and melting songs of other beings in other worlds—to youth the evening is delightful, it accords with the flow of his light spirits, the fervor of his fancy, and the softness of his heart. Evening is also the delight to virtuous age—it affords hours of undisturbed contemplation—it seems an emblem of the calm and tranquil close of busy life—serene, placid, and mild, with the impress of its great Creator stamped upon it; it spreads its quiet wings over the grave, and seems to promise that all shall be peace beyond it."

USEFUL INVENTION.

M. Farkas de Farkasalva, in Hungary, has invented a machine by which a person may plunge to the bottom of the sea, walk at the bottom, work with hands and feet, ascend easily to the surface, or stop in the middle, without any help; and in this manner remain several days under water, without intermission and without effort. It costs about £90, and only employs two men.

A GUN DISCHARGED.

We remember to have heard a good story relating to one Alexander Gun, who belonged to the Customs at Edinburg, and was dismissed for improper conduct. The entry opposite his name in the books stood thus: "A Gun discharged for making a false report."

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